

WHAT IS CLAIMED IS:

1. An innerspring assembly including at least two sets of coil springs,  
comprising:

a first set of coil springs having upper surfaces at a first elevation;

5 a second set of coil springs having upper surfaces at a second elevation that is  
offset from said first elevation; and

wherein one of said first and second sets of coil springs is compressed upon  
initial loading of the innerspring assembly, each of said first and second sets of coil  
springs being compressed upon continued loading of the innerspring assembly.

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2. The innerspring assembly of claim 1, wherein said first set of coil  
springs has lower surfaces at a third elevation, said second set of coil springs having  
lower surfaces at a fourth elevation that is offset from said third elevation.

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3. The innerspring assembly of claim 1, wherein said first set of coil  
springs has a first height, said second set of coil springs having a second height that is  
different from said first height.

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4. The innerspring assembly of claim 1, wherein said first set of coil  
springs has a first height, said second set of coil springs having a second height that is  
substantially equal to said first height.

5. The innerspring assembly of claim 1, wherein each of said coil springs  
are individually encased in a pocket; and

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wherein said first set of coil springs has a first pocketed height, said second set

of coil springs having a second pocketed height that is different from said first pocketed height.

6. The innerspring assembly of claim 1, wherein at least one of said first  
5 and second sets of coil springs has a barrel-shaped outer profile.

7. The innerspring assembly of claim 1, wherein said first set of coil  
springs has a barrel-shaped outer profile defining a convex side surface, said second  
set of coil springs having an hourglass-shaped outer profile defining a concave side  
10 surface, and wherein said convex side surface of one of said barrel-shaped coil springs  
is positioned proximate said concave side surface of one of said hourglass-shaped coil  
springs.

8. The innerspring assembly of claim 7, wherein said first set of coil  
15 springs has a barrel-shaped outer profile defining a first outer coil diameter, said  
second set of coil springs having a barrel-shaped outer profile defining a second outer  
coil diameter that is different from said first outer coil diameter.

9. The innerspring assembly of claim 1, wherein at least one of said first  
20 and second sets of coil springs is pre-loaded to a compressed state.

10. The innerspring assembly of claim 1, wherein said first set of coil  
springs is pre-loaded to a first compressed state, said second set of coil springs being  
pre-loaded to a second compressed state, and wherein said first and second  
25 compressed states exhibit different degrees of firmness.

11. The innerspring assembly of claim 10, wherein at least one of said first and second sets of coil springs is heat-tempered prior to being pre-loaded to said compressed state.

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12. The innerspring assembly of claim 10, wherein said first set of coil springs has a first uncompressed height when in a relaxed state, said second set of coil springs having a second uncompressed height when in a relaxed state that is substantially equal to said first uncompressed height.

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13. The innerspring assembly of claim 12, wherein said first set of coil springs has a first compressed height when in said first compressed state, said second set of coil springs having a second compressed height when in said second compressed state that is different than said first compressed height.

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14. The innerspring assembly of claim 10, wherein said first set of coil springs has a first uncompressed height when in a relaxed state, said second set of coil springs having a second uncompressed height when in a relaxed state that is different than said first uncompressed height.

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15. The innerspring assembly of claim 14, wherein said first set of coil springs has a first compressed height when in said first compressed state, said second set of coil springs having a second compressed height when in said second compressed state that is substantially equal to said first compressed height.

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16. The innerspring assembly of claim 10, wherein each of said coil springs are individually encased in a pocket to maintain each of said coil springs in said compressed state.

5           17. The innerspring assembly of claim 16, wherein said first and second sets of coil springs have a substantially uniform pocketed height.

18. The innerspring assembly of claim 16, wherein said first set of coil springs has a first pocketed height, said second set of coil springs having a second  
10 pocketed height that is different than said first pocketed height.

19. The innerspring assembly of claim 1, further comprising at least one additional set of coils springs having upper surfaces at a third elevation offset from said first and second elevations.

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20. An innerspring assembly including at least two sets of coil springs, comprising:

a first set of coil springs having a first height;

a second set of coil springs having a second height that is different from  
20 said first height; and

wherein one of said first and second sets of coil springs is compressed upon initial loading of the innerspring assembly, each of said first and second sets of coil springs being compressed upon continued loading of the innerspring assembly.

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21. The innerspring assembly of claim 20, further comprising at least one additional set of coils springs having another height that is different from said first and second heights.

5           22. The innerspring assembly of claim 20, wherein said first set of coil springs is pre-loaded to a first compressed state, said second set of coil springs being pre-loaded to a second compressed state, and wherein said first and second compressed states exhibit different degrees of firmness.

10           23. The innerspring assembly of claim 22, wherein said first set of coil springs has a first uncompressed height when in a relaxed state, said second set of coil springs having a second uncompressed height when in a relaxed state that is substantially equal to said first uncompressed height.

15           24. The innerspring assembly of claim 22, wherein said first set of coil springs has a first uncompressed height when in a relaxed state, said second set of coil springs having a second uncompressed height when in a relaxed state that is different than said first uncompressed height.

20           25. An innerspring assembly including at least two sets of coil springs, comprising:

          a first set of coil springs pre-loaded to a first compressed state;

          a second set of coil springs pre-loaded to a second compressed state; and

          wherein said first and second compressed states exhibit different degrees of  
25   firmness.

26. The innerspring assembly of claim 25, wherein at least one of said first and second sets of coil springs is heat-tempered prior to being pre-loaded to said compressed state.

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27. The innerspring assembly of claim 25, wherein said first set of coil springs has a first uncompressed height when in a relaxed state, said second set of coil springs having a second uncompressed height when in a relaxed state that is substantially equal to said first uncompressed height.

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28. The innerspring assembly of claim 27, wherein said first set of coil springs has a first compressed height when in said first compressed state, said second set of coil springs having a second compressed height when in said second compressed state that is different than said first compressed height.

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29. The innerspring assembly of claim 25, wherein said first set of coil springs has a first uncompressed height when in a relaxed state, said second set of coil springs having a second uncompressed height when in a relaxed state that is different than said first uncompressed height.

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30. The innerspring assembly of claim 29, wherein said first set of coil springs has a first compressed height when in said first compressed state, said second set of coil springs having a second compressed height when in said second compressed state that is substantially equal to said first compressed height.

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31. The innerspring assembly of claim 25, wherein each of said coil springs are individually encased in a pocket to maintain each of said coil springs in said compressed state.

5           32. The innerspring assembly of claim 31, wherein said first and second sets of coil springs have a substantially uniform pocketed height.

33. The innerspring assembly of claim 31, wherein said first set of coil springs has a first pocketed height, said second set of coil springs having a second  
10 pocketed height that is different than said first pocketed height.

34. The innerspring assembly of claim 25, wherein said first set of coil springs has a first height, said second set of coil springs having a second height that is different from said first height, and wherein one of said first and second sets  
15 of coil springs is compressed upon initial loading of the innerspring assembly, each of said first and second sets of coil springs being compressed upon continued loading of the innerspring assembly.

35. The innerspring assembly of claim 25, wherein said first set of coil  
20 springs has an upper surface arranged at a first elevation, said second set of coil springs having an upper surface arranged at a second elevation that is offset from said first elevation, and wherein one of said first and second sets of coil springs is compressed upon initial loading of the innerspring assembly, each of said first and second sets of coil springs being compressed upon continued loading of the  
25 innerspring assembly.

36. An innerspring assembly including at least two sets of coil springs, comprising:

5 a first set of coil springs having a barrel-shaped outer profile defining a convex side surface;

a second set of coil springs having an hourglass-shaped outer profile defining a concave side surface; and

10 wherein said convex side surface of one of said barrel-shaped coil springs is positioned proximate said concave side surface of one of said hourglass-shaped coil springs.

37. The innerspring assembly of claim 36, wherein said convex side surface of said one of said barrel-shaped coil springs is positioned proximate said concave surface of at least two hourglass-shaped coil springs.

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38. The innerspring assembly of claim 36, wherein said convex side surface of said one of said barrel-shaped coil springs is positioned proximate said concave surface of four of said hourglass-shaped coil springs.

20 39. The innerspring assembly of claim 36, wherein said first set of coil springs has a first height, said second set of coil springs having a second height that is different from said first height, and wherein one of said first and second sets of coil springs is compressed upon initial loading of the innerspring assembly, each of said first and second sets of coil springs being compressed upon continued



loading of the innerspring assembly.

40. The innerspring assembly of claim 36, wherein said first set of coil  
springs has an upper surface arranged at a first elevation, said second set of coil  
5 springs having an upper surface arranged at a second elevation that is offset from  
said first elevation, and wherein one of said first and second sets of coil springs is  
compressed upon initial loading of the innerspring assembly, each of said first and  
second sets of coil springs being compressed upon continued loading of the  
innerspring assembly.

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41. An innerspring assembly including at least two sets of coil springs,  
comprising:

a first set of coil springs having a barrel-shaped outer profile defining a first  
outer coil diameter;

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a second set of coil springs having a barrel-shaped outer profile defining a  
second outer coil diameter; and

wherein said first outer coil diameter of said first set of barrel-shaped coil  
springs is different from said second outer coil diameter of said second set of  
barrel-shaped coil springs.

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42. The innerspring assembly of claim 41, wherein said first set of coil  
springs has a first height, said second set of coil springs having a second height  
that is different from said first height, and wherein one of said first and second sets  
of coil springs is compressed upon initial loading of the innerspring assembly, each  
25 of said first and second sets of coil springs being compressed upon continued

loading of the innerspring assembly.

43. The innerspring assembly of claim 41, wherein said first set of coil  
springs has an upper surface arranged at a first elevation, said second set of coil  
5 springs having an upper surface arranged at a second elevation that is offset from  
said first elevation, and wherein one of said first and second sets of coil springs is  
compressed upon initial loading of the innerspring assembly, each of said first and  
second sets of coil springs being compressed upon continued loading of the  
innerspring assembly.

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